

Figure 1A

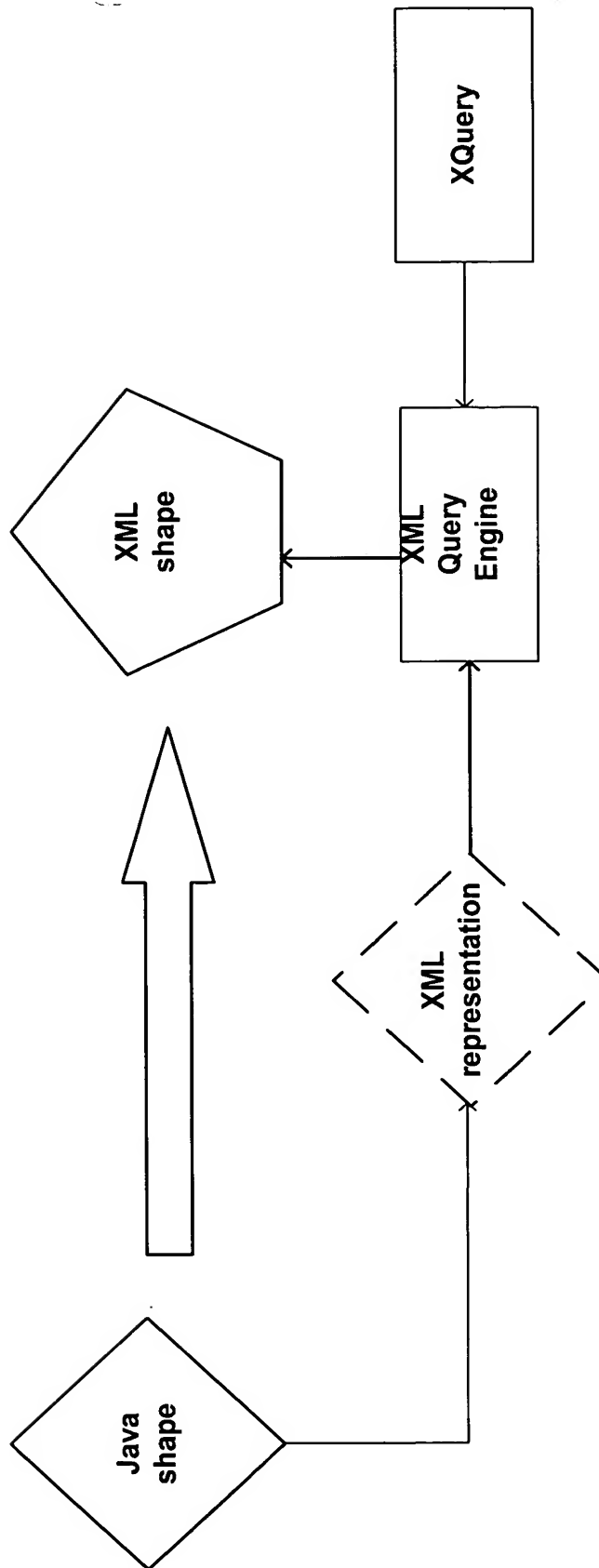


Figure 1B

// XML to Java XQuery transformation

```
public class customer {  
    int id;  
    String name;  
    String address;  
}  
  
/**  
 * @wlw:transform xquery::  
 * <Customer>  
 * <name>{$po/customer/name}</name>  
 * <id>{$po/customer/id}</id>  
 * <address>{$po/customer/address}</address>  
 * </Customer>  
 */  
Customer getCustomer(XML po);
```

// Java to XML transformation

```
public class PurchaseOrder {  
    int id;  
    int quantity;  
    string street;  
    string city;  
    string zip;  
}  
  
/**  
 * @wlw:transform xquery::  
 * <po>  
 * <id>{$po/id}</id>  
 * <qty>{$po/quantity}</qty>  
 * <address>{  
 *     formatAddress($po/street, $po/city, $po/zip)  
 * }</address>  
 * </po>  
 * ::  
 */  
  
XML poTransform(PurchaseOrder po);
```

Figure 2